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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/618,369 | 07/10/2003 | Steven McCanne | 019599-000320US | 6737 |

7590 12/18/2006
HICKMAN PALERMO TRUONG & BECKER, LLP
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| EXAMINER |
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CLOUD, JOIYA M

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| ART UNIT | PAPER NUMBER |
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2144

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 12/18/2006 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/618,369 | | MCCANNE ET AL. | |
| | Examiner | | Art Unit | |
| | Joiya M. Cloud | | 2144 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/10/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on May 21, 2003. Claims 1-1 are pending. Claims 1-15 represent System for multipoint infrastructure transport in a computer network.

2. Acknowledgment is made to the applicant's submission of Information Disclosure Statement, filed 07/10/2003.

3. ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121 (d) are required in this application because figures 6 and 7 are not completely legible. Examiner suggests redrafting the label "roup A" to read "Group A" or the applicants intended text. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claim 13 recites the limitation "the data store" in line 5. There is insufficient antecedent basis for the limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 6-15**, are rejected under 35 U.S.C. 102(e) as being anticipated by **Crawley (U.S. Patent No. 6,321,270B1)**.

As per claims 1-5, claims 1-5 are cancelled.

As per claim 6, Crawley teaches a processing agent (**the communication device of Figure 2**) for processing data at a node in a data network, wherein the data network connects a plurality of nodes and at least a portion of the plurality of the nodes form a multicast group, wherein one of the nodes in the multicast group is designated a rendezvous node (**Abstract and col. 1, lines 40-50**), the processing agent comprising:

a state memory (**Figure 2, storage device**); and
a protocol processor (**CPU**) having logic to couple to a selected node in the data network
(**col. 4, lines 10-20**),

and having logic to transmit and receive data with other processing agents in the data network over a data channel using a reliable protocol, the protocol processor couples to the state memory and has logic to store and retrieve the data to and from the state memory, respectively.
(**col. 3, lines 60-67 and col. 4, lines 1-5 and Abstract**)

As per **claim 7** teaches the processing agent wherein the selected node is a selected node in the multicast group and wherein the protocol processor further comprises:

logic to receive data from at least a first processing agent (**control point node**) in the multicast group over the data channel (**col. 2, lines 17-22 and col. 5, lines 55-64**);

logic to update the state memory with the data (**col. 3, lines 35-42**); and
logic to transmit the data over the data channel to at least a second processing agent
(**other network nodes in the multicast session**) associated with the multicast group (**col. 5, lines 4-10 and lines 5055**).

As per **claim 8** teaches the processing agent further comprising a packet forwarding engine, the packet forwarding engine coupled to the protocol processor, the state memory and the selected node, the packet forwarding engine comprising:

logic to retrieve the data from the state memory; logic to receive data packets transmitted on the data network; logic to process the received data packets based on the retrieved data from

the state memory to form an output data stream; and logic to transmit the output data stream on the data network (col. 3, lines 60-67 and col. 4, lines 1-5 and Abstract where Crawley teaches the device and functions of the communication device of Figure 2 capable of the listed limitations of the packet forwarding engine).

As per claim 9, Crawley teaches the processing agent wherein the packet forwarding engine has logic to process the received data packets based on priority information obtained from the retrieved data from the state memory (col. 6, lines 1-20, where the priority information is the control information received from the control point when a network node receives data for an unsupported multicast session).

As per claim 10, claim 10 lists substantially the same elements as claim 6 but in method form rather than apparatus form. Therefore, the supporting rationale of the rejection to claim 6 applies equally as well to claim 10.

As per claim 11, Crawley teaches the method wherein a joining node, that is a child peer to the selected node, joins the multicast group, the method further comprising steps of:

receiving an indication that the joining node has joined the multicast group (where the indication that a joining node has joined the multicast group takes place when the network node becomes an active participant in the session and the multicast data is handled, col. 6, lines 50-54); and propagating data from the state memory to the joining node over the data channel using a reliable protocol (col. 6, lines 55-65).

As per claim 12, teaches the method further comprising the steps of:

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receiving a query (**request**) from a requestor in the data network, regarding data in the state memory (**col. 6, lines 10-13**); and

transmitting at least a portion of the data in the state memory to the requestor over the data channel in response to the query (**col. 6, lines 16-20**).

As per claim 13, claim 13 teaches substantially the same as claims **6 and 7** and thus is rejected using the same rationale.

As per claim 14, claim 14 teaches substantially the same as claims **10 and 11** and thus is rejected using the same rationale.

As per claim 15, Crawley teaches the method wherein the means for propagating comprises logic at each of the processing agents to implement a data channel using a reliable protocol (**col. 8, lines 31-33**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joiya Cloud whose telephone number is 571-270-1146. The examiner can normally be reached Monday to Friday from on 7:30am-5:00pm.

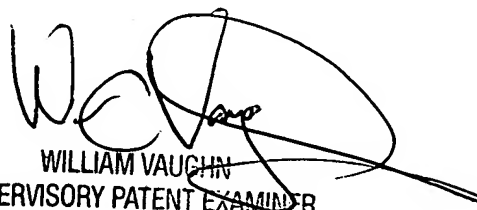
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3922. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC

William J. Vaughn

Supervisory Patent Examiner

December 11, 2006


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
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